

Summary of Student Perspectives Series Meeting, November 7, 2019

Trustees in Attendance: Michael J. Klingensmith, Thomas A. Cole, John Liew, Paula Wolff

Students in Attendance: Ridgely Knapp (4th Year, College, Undergraduate Liaison), Rohail Premjee (2nd Year MPP/MBA student in Harris and Chicago Booth, Graduate Liaison), Terra Baer (2nd Year, College), Katalina Connors (4th Year, College), Dinesh Das Gupta (2nd Year, College), Perrin Davidson (3rd Year, College), Kimika Padilla (4th Year, College), Amy Tian (3rd Year, College)

Guest: Alicia Berg, Assistant Vice President for Campus Planning + Sustainability

The topic of the November 7 meeting was **the University's role and current student efforts around addressing climate change**. In advance of the meeting, the undergraduate liaison prepared a memorandum (attached) for the Trustees that included questions for discussion focusing on: (1) the University's emission goals; (2) effective communication of current efforts, and (3) off-campus living and sustainability.

Following a round of introductions, Mr. Klingensmith provided some opening remarks on the role of the Board of Trustees. He highlighted that the Board's primary duties include oversight of major decisions and philanthropy and not day-to-day operations, which is the purview of the President and the Vice Presidents. Mr. Klingensmith also noted that the Trustees attending the meeting would be expressing their own views and not speaking for the Board as a whole. Finally, he stated that ideas and suggestions that emerged from SPS meetings would be conveyed back to key members of the administration for further discussion and action.

The undergraduate liaison reviewed the meeting's topic and the areas of focus for the discussion. According to the 2016 Baseline Report on the University's Sustainability Plan, "managing greenhouse gas emissions is the University's top sustainability priority."¹ By the end of FY2018, the University had achieved an approximate 11% decrease in greenhouse gas emissions, thereby making good progress toward reaching its 20% reduction goal by 2025. However, peer institutions have set more ambitious emissions goals than UChicago, through either more aggressive reductions over a similar time period or plans to be fossil fuel-free or -neutral in the next 20-30 years. Shouldn't UChicago have the same aspirations? The Trustees were asked to share any experiences or insights on how the work and accomplishments of various campus groups and offices can be more effectively coordinated and communicated to the broader University.

The students then turned to a one-page handout they brought to the meeting (attached) which presents issues reflecting their collective experience working on sustainability issues. Some of the major themes of this handout referenced the need for improved access to data to help inform

¹ <https://sustainability.uchicago.edu/sp/>, accessed 11/12/2019

their projects and a central clearinghouse for sustainability efforts at the University. For instance, students have been interested in better understanding water usage at the University and seeking solutions to energy inefficiency in the older buildings on campus (driven largely by their incompatible heating and cooling systems), but have been stymied on both fronts by the lack of pertinent data. Requests to the Office of Sustainability are often not fulfilled in a timely way, either because the data are not made available to students or because the office is too small to get to every request.

Stanford and Loyola Chicago were cited as two universities with exemplary approaches to campus sustainability. [Sustainable Stanford](#) is a web portal that brings all sustainability-related data, initiatives, scholarship and action/advocacy resources together in one place. Loyola's [Institute of Environmental Sustainability](#) integrates degree programs, research and initiatives with institutional goals for sustainability and conservation that are infused with the university's commitment to social justice. Loyola students can have hands-on, practical experiences that are tied to academics within the framework of the IES's curricular and degree offerings. The [Harvard Forest](#) was mentioned as another example of a place where academics and experiential learning are combined in a way that appeals to students interested in climate change, the environment and conservation. While the students expressed appreciation for opportunities to visit the Indiana Dunes as part of field courses and short-term research projects, they crave more opportunities than what is currently available.

Another need identified by the students was dedicated funding for student sustainability projects. [Harvard](#) has \$12 million earmarked for capital funding for projects that decrease the university's impact on the environment. Funds must be repaid using the savings generated by the project over a five to ten year period. Northwestern students can apply for funding from a \$50 thousand "[Green Fund](#)" available through the university's sustainability office. The students would like to see a similar fund offered at UChicago, with money provided by various offices, philanthropy and even student fees. They see particular value in funding projects that bring together individuals and groups representing diverse disciplinary backgrounds such as STEM and public policy.

In response to a question about how many students would take advantage of such a fund, the students responded that it is difficult to know given that students are plugged into various sustainability and environmental activities in our highly decentralized environment; nevertheless, interest in these issues seems markedly higher than in years past and applications to participate in Student Government's [Campus Sustainability Committee](#) (made permanent this year after years as an *ad hoc* group) are up.

The graduate liaison mentioned that Graduate Council leadership recently attended a meeting of their Ivy Plus institution counterparts where sustainability and climate change was discussed. Compared to our peers, UChicago has less data available on its sustainability website and has fewer staff in the sustainability office. As a result, it would be potentially difficult to develop programs and initiatives aimed at students living off-campus to help them live sustainably.

In reference to Loyola's Institute of Environmental Sustainability, the students were asked how it got started and whether faculty members were involved. The students who had visited the IES commented on the scale of its building and the fact that many faculty had offices and labs in it. Sustainability is clearly a signature strength at Loyola and attracts students for whom it is a highly-ranked value. In contrast, faculty at UChicago do not have the same ease in identifying potential collaborators because they are physically dispersed over different departments and divisions. Faculty interest exists, however, as evidenced by Environmental Frontiers in the Mansueto Institute, a faculty report on sustainability submitted to the Provost in 2016 and the recently created "Water Cohort" involving various STEM departments.

The discussion then turned to how sustainability and climate change concerns are addressed in the corporate world. With respect to institutional investing, the United States is somewhat behind Europe and Australia in the application of "Environmental, Social and Governance" (ESG) criteria to make socially conscious investments. After emerging about five years ago, ESG investing has gone mainstream and to remain competitive, investment and money management firms will need to consider hiring individuals with the requisite expertise to help managers make informed decisions. This is particularly important for firms that take a quantitative (versus activist) approach to investing as they are ultimately driven by the need to make money for their clients, which is not always compatible with strict application of ESG criteria. Moreover, different ESG scoring systems yield different sets of data, which can complicate investment decisions even further.

This "data problem" potentially applies at the University as students' desire for greater access to more data about energy and water usage, emissions, etc. grows. It may not be a matter of the administration being unwilling to give students the data they need to work on projects and initiatives, but primarily a concern over the quality and/or completeness of data and whether its use will lead to incorrect conclusions. As the methods of collecting and compiling data at the University improve, students should see a corresponding enhancement in the information available to them.

It was pointed out that most "new and growing" fields are inherently messy with "terrible" data and lots of unanswered questions. Innovators and entrepreneurs have to wade in and make progress through incremental change – if everything they need to work with is already perfect, then there is probably not much left for them to do.

The students agreed that with the relatively transitory nature of students and student leadership in particular, documenting the steps taken to make improvements is essential. Not only will this help new students more easily navigate the institution and its resources, but it will ideally eliminate redundancy and reinventing the wheel. Student Government's Campus Sustainability Committee is attempting to capture student activities and accomplishments through an annual report, which will hopefully help in this regard, as will the creation of a coalition of student groups that will meet monthly and work on coordinating efforts and communications.

When asked whether young alumni would be interested in making donations to a UChicago “Green Fund,” the students present answered affirmatively. There could also be utility in connecting current students to alumni for internship and employment opportunities in sustainability-related areas. The students did not generally find [WISR](#) or Handshake helpful in this regard, but there may be steps Career Advancement and ARD could take to pay more attention to these kinds of opportunities and connections, particularly as position offerings are poised to grow in this sector.

The meeting ended at 9:00 a.m. with a consensus that coordination and communication of efforts by students and the University was a vital next step.

STUDENT PERSPECTIVES SERIES: AUTUMN 2019 MEMORANDUM

TO: Student Perspectives Series Trustees
FROM: Ridgley Knapp, Undergraduate Liaison to the Board of Trustees
DATE: October 19, 2019
SUBJECT: Strategic Themes and Question Prompts for November 7 SPS Meeting

I look forward to meeting you to discuss the pressing needs presented by climate change and how the University of Chicago and our student body can both continue UChicago's modest movements in the right direction and heighten our goals to keep us abreast of our peer institutions. In advance of our meeting, I am proposing the following themes and question prompts for your consideration, which I hope can provide us with one (or several) jumping off points into a productive conversation:

1. **An Emissions Goal beyond 2025:** The University's goal of cutting 20% of our greenhouse gas emissions by 2025 is running slightly ahead of schedule, currently at an approximately 11% reduction from base-year levels (see attached report). Looking beyond 2025, what should the University's next steps be to continue this momentum?
2. **Effective Communication of Current Efforts:** From running ahead of our emissions reduction goal to a concerted effort to make new and major projects as sustainable as possible, the University's work in sustainability and environmentalism deserves acknowledgement. How best could the University effectively communicate its accomplishments in sustainability while at the same time open up avenues for dialogue around areas that could still use improvement, innovation, and student engagement?
3. **Off-Campus Living and Continued Sustainability:** A significant number of students move off-campus following their second year, so any efforts aimed at students living in our dormitories (such as the Sustainability Czars) will only be so effective after those students move out of on-campus housing. What is the best way to ensure that students living off-campus live with an element of environmental consciousness?

As we move through our conversation, it would be helpful to learn how trustees' experiences in their respective fields inform their opinions on these questions in similar or different ways to the students' experiences on campus and/or in their various RSO's or internships. I look forward to our conversation.

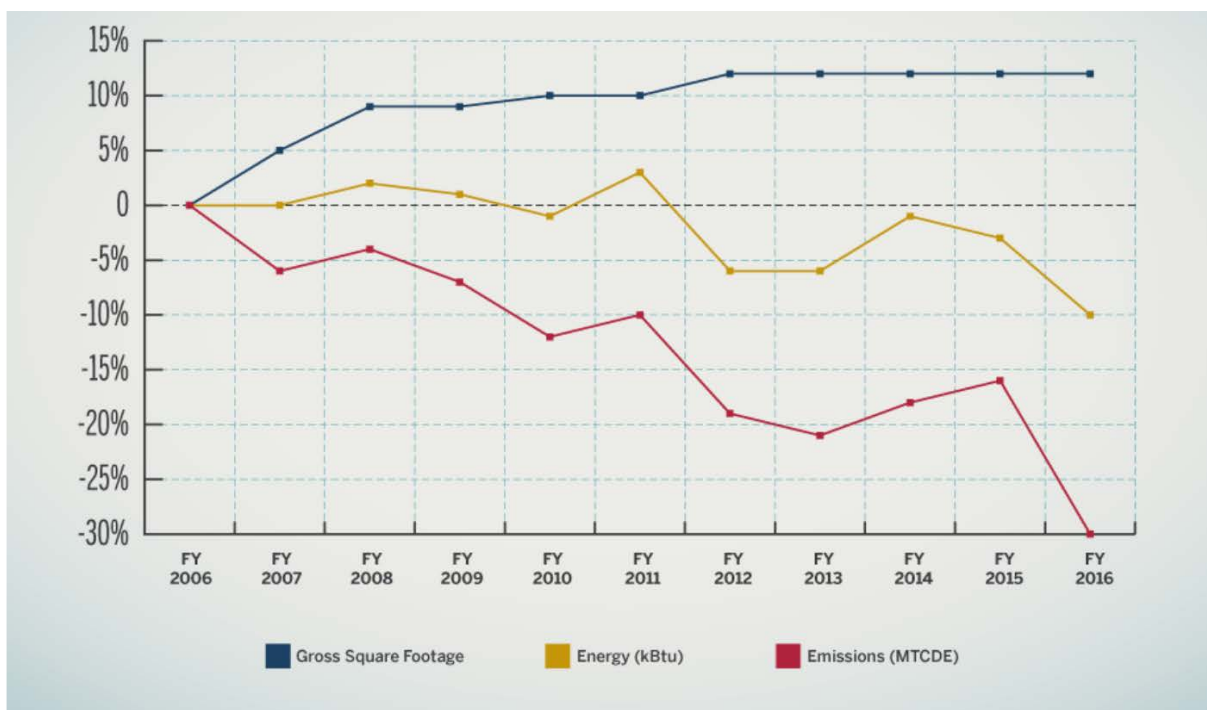
Comparing Greenhouse Emissions Reduction Goals with Peer Institutions

In the University's most recently released [Sustainability Plan Baseline Report](#) in November 2016¹, the Office of Sustainability reported an approximate 1% decrease in greenhouse gas emissions from the target base year² towards its 2025 goal of a **20% reduction**. In a recent meeting with leadership of the office, they indicated the University is operating slightly ahead of schedule, currently having reduced emissions by 11%.

While the speed with which the University is reaching its goal is admirable, both the goal's modesty and the lack of a longer-term goal differentiate us from our peer institutions.

Between 2008 and 2016, **Harvard University** successfully implemented an eight-year plan to cut greenhouse emissions by **30%**³; their next set of goals, put forth in 2018, are to be not only **fossil-fuel free by 2050**, but **fossil fuel-neutral by 2026**⁴.

Harvard: Change in Absolute Emissions, Energy, and Square Footage, 2006—2016⁴



Facilities teams focused on constructing and operating more energy efficient buildings to curb emissions. Graphic by Judy Blomquist/Harvard Staff

¹ University of Chicago, "Sustainability Plan," <https://sustainability.uchicago.edu/sp/>, accessed 10/10/19.

² The target base year was calculated as the average emissions from the years 2012-2014.

³ Colin Durant, "Curbing Carbon on Campus," 12/08/16,

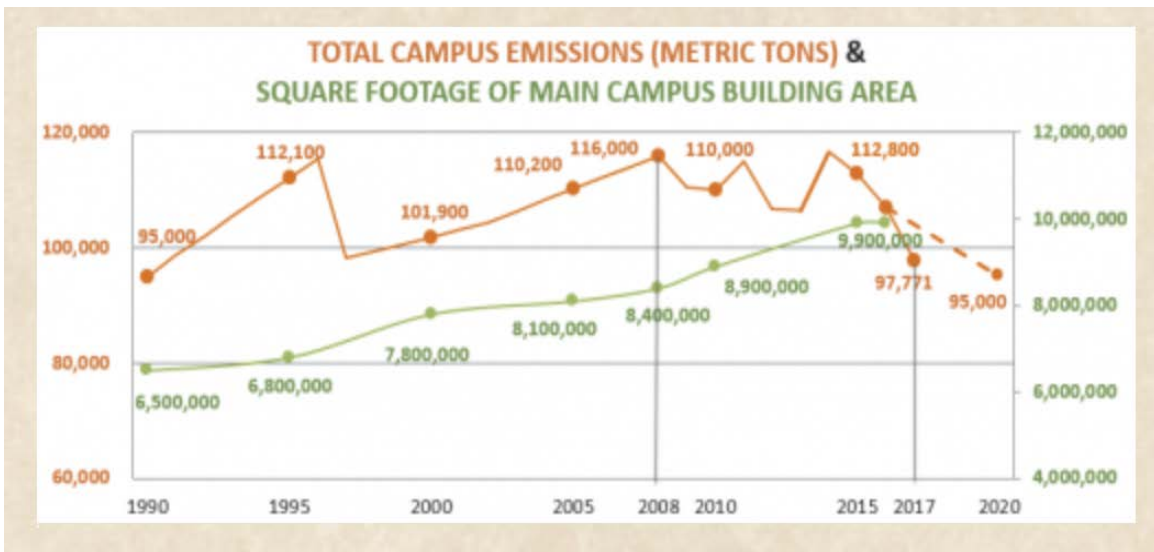
<https://news.harvard.edu/gazette/story/2016/12/harvard-achieves-greenhouse-gas-reduction-goal/>

⁴ Harvard University Sustainability Report, <http://report.green.harvard.edu/>, accessed 10/10/19

Yale University, like us, remains in the first iteration of their sustainability initiative, launched in 2015, but their goals are equally ambitious as Harvard’s – reduce greenhouse gas emissions by **43% by 2020**, and, by 2019, “develop a strategy to **achieve carbon neutrality by or before 2050**.”⁵ Yale has also successfully kept campus abreast of its activities, publishing its progress *every year* since 2006.⁶

Princeton University has the most similar short-term plan to ours, with a 19% reduction goal by 2020. We’re even ahead of them – the Tigers have only dropped their emissions by 9% so far. However, Princeton also sports a longer-term tiered goal system: beyond a 19% reduction by 2020, they also aim for a 37% reduction by 2026, and full carbon neutrality by 2046.⁷ Like Yale, Princeton is also successfully dropping its emissions as its campus grows.

Princeton: Total Campus Emissions and Square Footage of Main Campus Building Area⁸



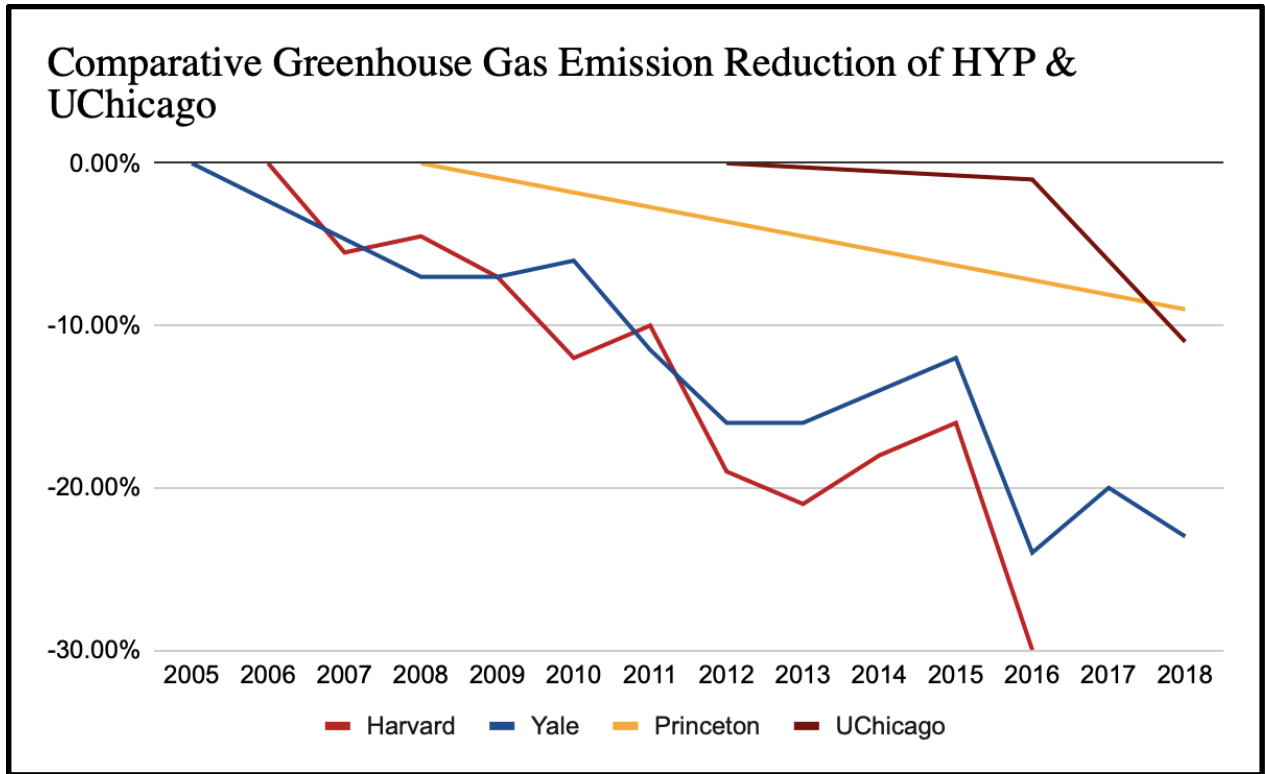
Overall, **UChicago is behind** – despite being ahead of Princeton in terms of emissions reduction. Our long-term goals end in 2025, while Harvard, Princeton, and Yale have plans that stretch out to 2050, with quantifiable steps along the way.

⁵ Yale Sustainability Report, <https://yale.app.box.com/s/xagi53f5qvplkv31zdebe8rilgt3b6x>, page 22, accessed 10/10/19.

⁶ Yale Sustainability, <https://sustainability.yale.edu/priorities-progress/climate-action/greenhouse-gas-emissions>, accessed 10/16/19.

⁷ Princeton University Sustainability Action Plan: Toward 2026 and Beyond. <https://sustain.princeton.edu/sites/sustainability/files/Sustainability%20Action%20Plan%20-%20Accessible%20Version.pdf>, accessed 10/10/19.

⁸ Sustainability at Princeton, <https://sustain.princeton.edu/progress/energy>, accessed 10/16/19.



Additional Background and Context

From the pilot Housing & Residential Life sustainability “czar” program⁹ to our own Sustainability Reports, it is clear that the University and its offices and administration seek to spread both the news of the University’s climate and sustainability improvements and to ensure that students are as well-equipped as possible to make their own lives more environmentally conscious.

However, the communication to the student body regarding the University’s successes, as well as places where it may improve, leaves much to be desired. For example, a recent campus dialogue concerning LEED (Leadership in Energy and Environmental Design) standards and the forthcoming Woodlawn Residential Commons (WRC). There was a fair amount of student displeasure when it was learned that WRC would not comply with published University standards that require new major projects to pursue LEED certification.

However, in speaking with a member of the Office of Sustainability, the reason for this discrepancy appeared to stem more from the fact that WRC will be a primarily residential building, and an attempt to combine LEED standards with residential life standards produced significant hardships. I strongly believe that if this were to be

⁹ “Sustainability Czars” are students who live in College Housing and provide leadership around sustainability efforts in their houses, including presentations to fellow students, organizing energy reduction and recycling efforts, etc.

relayed to the undergraduate body in some way or another, then some feelings of displeasure would be assuaged.

Furthermore, there is room for better communication between the administration, the Office of Sustainability, student sustainability groups, and the student body at large. On October 18, Princeton University held a **Climate Action Town Hall**, sponsored by their Office of Sustainability and a student-run organization, that featured two members of the administration speaking on that university's long-term sustainability goals.¹⁰

Effective communication, it seems, would benefit also from a long-term sustainability goal, similar to our peer institutions' commitments to carbon neutrality by the middle of the 21st century, around which every interested party may commit themselves.

The University's Office of Sustainability has prepared the attached update on the University's sustainability efforts, which you may find to be useful context for our conversation.

¹⁰ "Climate Action Town Hall," <https://sustain.princeton.edu/events/climate-action-town-hall>, accessed 10/10/19.

STUDENTS PARTICIPATING IN THE NOVEMBER 7, 2019, SPS MEETING

The following students represent a broad and diverse set of interests and participation in student sustainability initiatives across the undergraduate student body.

Kimika Padilla – Princeton, MN

Kimika is a fourth-year student majoring in Public Policy and Environmental and Urban Studies. She serves as student coordinator of the Program on Global Environment.

Perrin Davidson – Freeport, ME

Perrin is a second-year student majoring in Physics. He serves as co-president of the Environmental Research Group and founded the Chicago Environmental Leadership Initiative.

Dinesh Das Gupta – Washington, DC

Dinesh is a second-year student majoring in Environmental and Urban Studies and Public Policy. He serves as a member of the College Council for the Class of 2022, a position for which he campaigned heavily on environmentalism and sustainability.

Katalina Connors – Rowayton, CT

Kate is a fourth-year student majoring in Environmental and Urban Studies and Human Rights. She spent the past summer analyzing European emissions data in Berlin.

Amy Tian – Chicago, IL

Amy is a third-year student majoring in Biology and Public Policy. She serves as president of the Phoenix Sustainability Initiative after previously serving as Media & Events Chair.

Terra Baer – San Francisco, CA

Terra is a second-year student majoring in Environmental and Urban Studies and Law, Letters, and Society. She serves as Vice President of the Phoenix Sustainability Initiative.



STUDENT LIAISONS TO THE BOARD 2019-2020

UNDERGRADUATE LIAISON: **Ridgley Knapp**



Ridgley is a fourth-year in the College majoring in public policy with a minor in religious studies. Originally from Connecticut, Ridgley has spent his past three years in Illinois working to increase voter turnout on college campuses, serving as a member of the undergraduate College Council, and competing nationally for the University's club varsity rowing team. A former president of the UChicago College Democrats, Ridgley is passionate about ensuring that all students have a voice when it comes to major University policies. After completing his undergraduate degree, Ridgley plans to remain in Hyde Park and pursue a master's degree in public policy from the Harris School of Public Policy.

GRADUATE LIAISON: **Rohail Premjee**



Rohail is a second-year MBA/MPP joint degree candidate at the Booth School of Business and Harris School of Public Policy. He earned his undergraduate degrees in government and philosophy from Dartmouth College, graduating cum laude. At Dartmouth, Rohail received the Dean's Plate Leadership Award for Outstanding Contribution to Campus Life. After graduation, Rohail was awarded the Dartmouth Presidential Fellowship to work in the President's Office at Dartmouth on strategic planning for new initiatives. Rohail continued his interest blending philanthropy and finance at the Aga Khan Development Network on their Impact Investing Initiative in Washington, D.C. He later moved to Karachi, Pakistan, to be the Strategic Initiative Associate in the CFO's Office at the Aga Khan University and Hospital System. Rohail plans to transition to management consulting for social enterprises to help fulfill his long-term ambitions in philanthropic innovation. He progressed toward this goal by working at Accenture Consulting's Public Services team in Boston this past summer. Originally from Fort Worth, Texas, Rohail is passionate about seeking out new restaurants and coffee shops wherever he travels.

Sustainability at the University of Chicago

Overview and Update

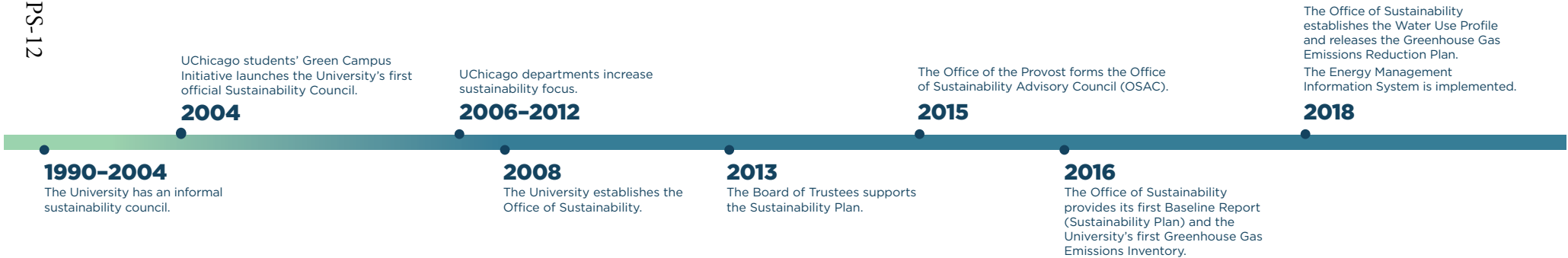
October 2019

SPS-11

Sustainability at the University of Chicago

The University of Chicago is committed to creating a sustainable campus. With its tradition of rigorous inquiry, the University is positioned to evaluate the challenges of sustainability and create measurable results.

SPS-12



The University of Chicago Sustainability Plan

The University of Chicago [Sustainability Plan](#) includes goals, progress, and next steps organized in nine areas: Climate Change and Energy, High Performance Buildings, Multi-Modal Transportation, Waste Reduction, Food Systems, Green Space, Water Conservation, Environmentally Preferable Procurement, and Building Awareness and Partnerships. The first report listing the University's accomplishments was published in November 2016.

Environmentally Preferable Procurement, and Building Awareness and Partnerships. The first report listing the University's accomplishments was published in November 2016.



AREA 1
CLIMATE CHANGE AND ENERGY

**Approximate
1% decrease in
greenhouse
gas emissions**



AREA 2
HIGH PERFORMANCE
BUILDINGS

9 LEED certified
buildings since 2010

200+ building energy
efficiency
measures
since 2009



AREA 3
MULTI-MODAL TRANSPORTATION

39% decrease in greenhouse
gas emissions from
student commuting

15% decrease in greenhouse
gas emissions from faculty
& staff commuting



AREA 4
WASTE REDUCTION

More than 40%
of UChicago waste
was diverted from
landfills in 2015.



AREA 5
FOOD SYSTEMS

35% of food served is grown,
processed, and purchased
within 150 miles.

40% of food served is grown,
processed, and purchased
within 250 miles.



AREA 6
GREEN SPACE

46%

**of the University of Chicago
campus is green space.**



AREA 7
WATER CONSERVATION

14 centrally controlled smart
irrigation systems installed

120,000
gallon underground stormwater
retention system installed in 2015



AREA 8
ENVIRONMENTALLY
PREFERABLE PROCUREMENT

100% of the cleaning products
used in UChicago dining
halls and kitchens are
Green Seal certified.

80% of the University's
janitorial supplies are
green products.



AREA 9
BUILDING AWARENESS
AND PARTNERSHIPS

27,000+
UChicagoans have a role
to play in creating a more
sustainable campus.

Following are brief updates since the Sustainability Plan was posted in 2016.

Area 1: Climate Change and Energy

Goal: Reduce the University greenhouse gas emissions by 20% by 2025

Although the plan has nine focus areas, greenhouse gas emissions reduction is the key sustainability goal as the University seeks to reduce its contribution to climate change. Since natural gas and electricity use contribute to approximately 70% of the University's greenhouse gas emissions and as impacting energy use results in cost avoidance to the University, the majority of actions have been in identifying and implementing energy conservation measures. Through 2017, approximately 200 energy conservation measures have been implemented, reducing normalized emissions by 11% and absolute emissions by 1%.

[The University of Chicago Greenhouse Gas Emissions Reduction Plan \(FY2018-FY2025\)](#) was developed and posted in 2018 as an outline to guide meeting the 2025 goal. The plan includes five strategies, as indicated below, and is currently being implemented.

Highlights of implemented energy conservation measures include:

- Completed 12 projects using ComEd's retro-commissioning program.

- Completed multiple central plant efficiency projects to recover waste heat from boilers, return more condensate from the buildings, and install steam blanket insulation.
- Improved lighting quality and controls in 16 buildings, and exterior lighting, saving over one million kilowatt hours annually.

This goal is a fairly common one throughout higher education, and many institutions have already achieved or surpassed this target. While the University can continue down the path to achieve its current goals, there are opportunities to develop and achieve more aggressive emissions reduction goals through purchasing green electricity combined with continued investments in energy efficiency projects.

SPS-14

| RECOMMENDED INITIATIVES FOR ACHIEVING THE 2025 GOAL | | |
|---|---|---------------------------------------|
| MEASURE TYPE | DESCRIPTION | GHG EMISSIONS REDUCTION CONTRIBUTIONS |
| Building Preventative Maintenance and Commissioning (PM+Cx) | Investigate the top energy consuming buildings on campus for operational improvement and energy conservation opportunities. | 36.5% |
| Central Plant Efficiency Upgrades | Implement energy efficiency upgrades at the campus steam and chilled water plants. | 28.7% |
| Building-level Capital Energy Efficiency Projects | Implement capital projects that are identified through the PM+Cx process. | 10.4% |
| Lighting Upgrades | Indoor and outdoor lighting upgrades around campus. | 2.0% |
| Off-site Renewable Energy | Purchase renewable energy credits for off-site energy production. | 22.4% |
| TOTAL | | 100.0% |

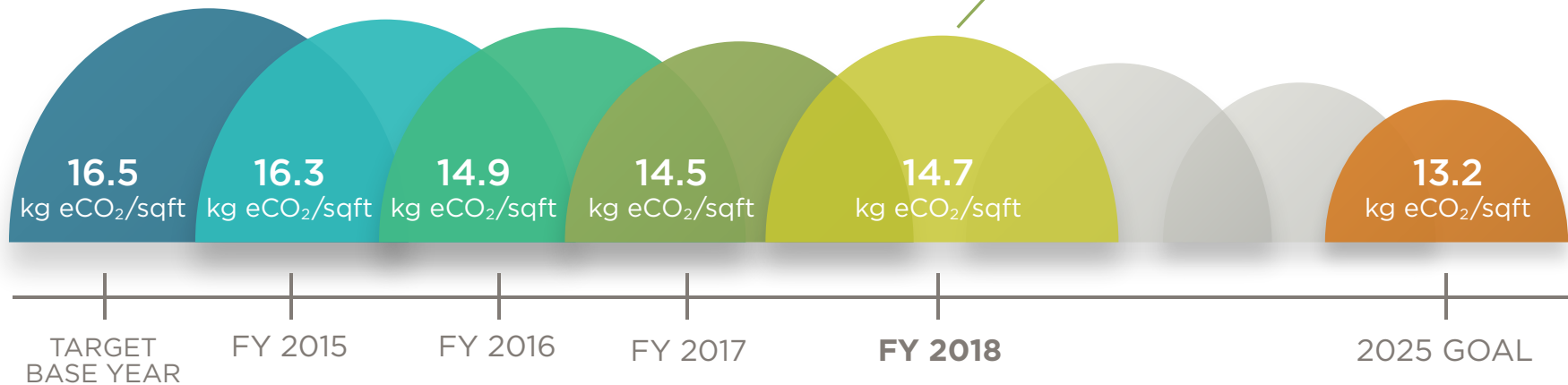
Scopes 1 and 2 Carbon Intensity (Greenhouse Gas Emissions Per Square Foot)

UNIVERSITY GREENHOUSE GAS EMISSIONS

Carbon intensity (greenhouse gas emissions per square foot) is measured in kilograms equivalent carbon dioxide per square foot (kg eCO₂/sqft). The 2025 goal is based on scopes 1 and 2 carbon intensity.

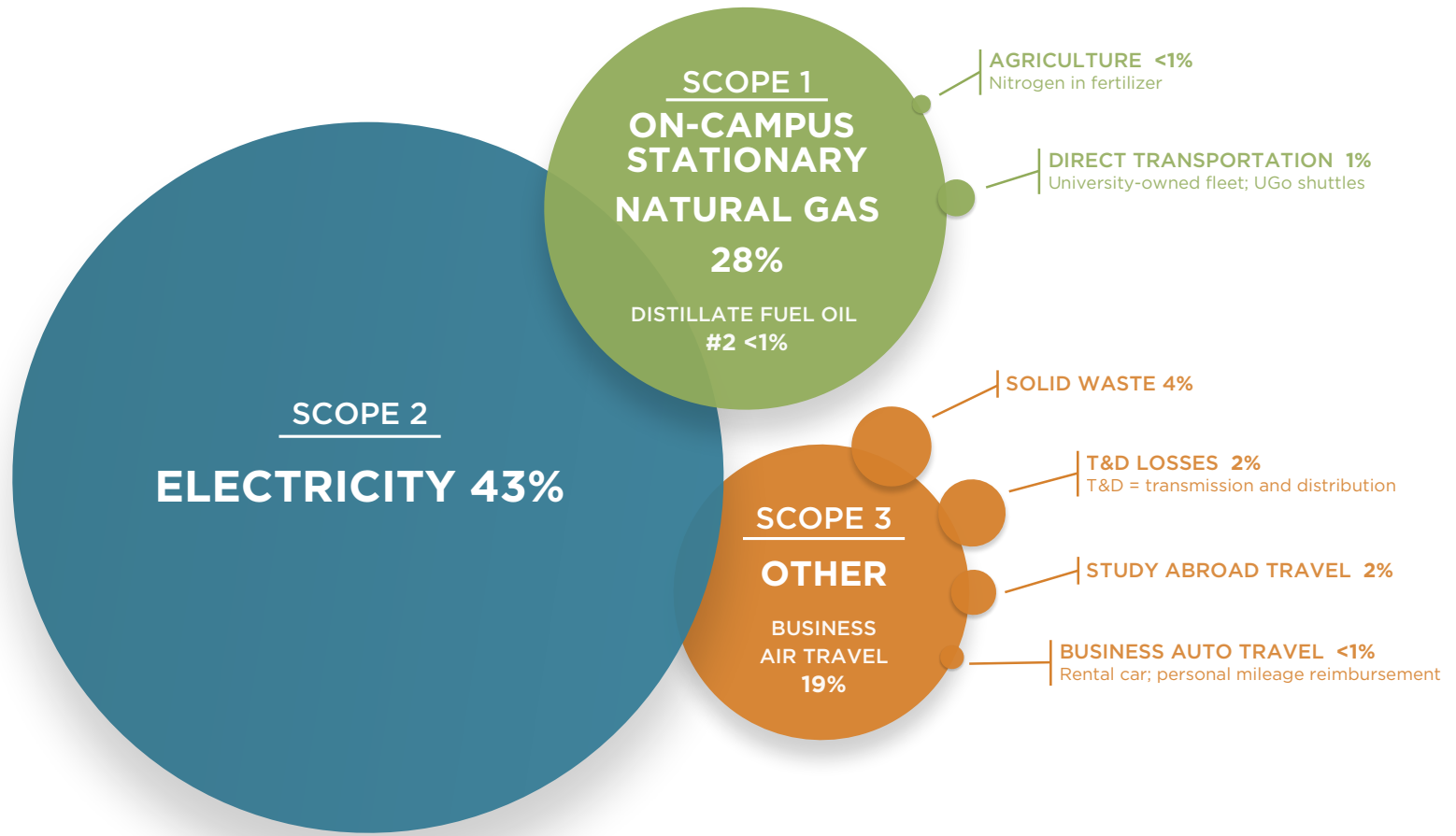
Approximate 11% decrease in greenhouse gas emissions from the target base year

SPS-15



A NOTE ON TARGET BASE YEAR The target base year is calculated and is the average of the greenhouse gas emissions from fiscal years 2012 through 2014. It is used for setting and tracking progress toward the Sustainability Plan greenhouse gas emissions reduction goal. For example, to assess performance for fiscal year 2018, the greenhouse gas emissions from fiscal year 2018 (14.7 kg eCO₂/sqft) are compared to the greenhouse gas emissions from the target base year (16.5 kg eCO₂/sqft). This comparison reveals an approximate 11 percent decrease in greenhouse gas emissions. Greenhouse gas emissions for each subsequent year will be compared to the target base year, and performance will be assessed accordingly.

FY2018 Scopes 1, 2, and 3 Greenhouse Gas Emissions by Source



Area 2: High Performance Buildings

Goal: Reduction the consumption of natural gas and electricity

The U.S. Green Building Council's LEED® (Leadership in Energy & Environmental Design) green building certification program is the preeminent program for the design and construction of high-performance buildings. Sixteen University buildings have achieved LEED® Silver or above since 2010. Keller Center is pursuing the University's first LEED® Platinum certification and is also pursuing the Living Building Challenge. All new major capital projects with a construction cost greater than \$5 million have Board of Trustee support to pursue LEED® Silver. For more information, see page 8 and [LEED buildings on campus](#).

For projects under \$5 million, Facilities Services has recently amended University [Facilities Services Facility Standards](#) project guidelines to support integrating sustainable strategies that are readily achievable on small projects. Areas addressed include: sites and grounds including storm water management; heating, ventilation, and air conditioning retrofits including energy metering; lighting controls and building automation systems; plumbing fixtures; and design strategies, furniture, fixtures and equipment. Projects initiated during fiscal year 2020 will serve as a pilot.

A pilot green labs initiative involving laboratory energy use reduction is taking place at Searle Chemistry laboratory. The behavioral project encouraging lab occupants to shut-the-sash when not in use is evaluated and monitored by Office of Sustainability interns who are students in the College.

In 2018, Regenstein Library received the Mayor's Leadership Circle award, awarded to any property team that reaches or exceeds the 20% energy reduction target for their property in the Retrofit Chicago Energy Challenge.

Area 3: Multi-Modal Transportation

Goal: Reduce transportation related greenhouse gas emissions

Campus Planning + Sustainability is collaborating with Transportation and Parking to identify near-term and long-term strategies and recommendations to encourage the reduction of single-occupancy vehicles on campus. The results of a recent campus-wide survey provided data to support this effort.

Area 4: Waste Reduction

Goal: Reduce the amount of total landfilled waste

Facilities Services developed a pilot residence hall recycling initiative to be implemented Autumn Quarter 2019. This is in direct response from student feedback regarding confusion in residence halls regarding recycling. New signage was developed, will be posted, and tested through waste audits. If successful, the signage will be implemented at other residence halls, where feasible as legacy buildings have limited space for receptacles in trash rooms.

A pilot green labs initiative, involving laboratory recycling is taking place in a laboratory in GCIS.

[Facilities Services Facility Standards](#) were amended to include a construction waste policy for all projects, including those under \$5 million in construction costs.

LEED Certified Buildings at the University of Chicago

Platinum

| | |
|---------------|------------------------------------|
| Keller Center | LEED Certification in Progress |
| Harper Court | ID+C: Commercial Interiors (v2009) |

Gold

| | |
|--|-------------------------------------|
| Physics Research Center | BD+C: New Construction (v4) |
| Campus North Residential Commons | BD+C: New Construction v3—LEED 2009 |
| Neubauer Collegium | BD+C: New Construction (v2009) |
| Reva and David Logan Center for the Arts | BD+C: New Construction (v2009) |
| Searle Chemistry Laboratory | LEED NC (New Construction) v2.2 |
| Saieh Hall for Economics | BD+C: New Construction (v2009) |
| 6045 S. Kenwood | LEED CI (Commercial Interiors) v2.0 |
| Chicago Theological Seminary | LEED NC (New Construction) v2.2 |
| Facilities Services Building | BD+C: New Construction (v2009) |
| UChicago Child Development Center—Drexel | BD+C: New Construction (v2009) |
| UChicago Child Development Center—Stony Island | BD+C: New Construction (v2009) |
| Harper Court | BD+C: Core and Shell (v2009) |
| Harper Court | ND: Built Project (v2009) |

Silver

| | |
|-----------------------------------|--------------------------------|
| William Eckhardt Research Center | BD+C: New Construction (v2009) |
| Lab School—Gordon Parks Arts Hall | BD+C: New Construction (v2009) |
| Earl Shapiro Hall | BD+C: New Construction (v2009) |
| Center for Care and Discovery | BD+C: New Construction (v2009) |

| | | | | |
|--------|---|--------------------------------|---|----------------------|
| BD + C | = | Building Design + Construction | = | New Construction |
| ID + C | = | Interior Design + Construction | = | Commercial Interiors |
| ND | = | Neighborhood Development | | |

Area 5: Food Systems

Goal: Increase the amount of responsibly raised, grown, and sourced food purchased by UChicago Dining

UChicago Dining, in partnership with Bon Appétit, strives to reduce the environmental footprint while developing programs that promote sustainability through environmentally friendly products and practices, sustainable food and local purchasing options, energy and water conservation efforts, and waste management. Below are some highlights:

- Strive to purchase at least 20% of ingredients from small farmers, ranchers, fishermen, and food producers within 150 miles.
- 100% of ground beef is sourced from suppliers certified by Humane Farm Animal Care Certified Humane program.
- 100% of pork comes from sows raised in higher-welfare group housing and are never given antibiotics or growth promoters.
- Plant-forward menus offered daily.
- 100% of fryer oil waste is diverted from the landfill.
- Leftover food is regularly donated.
- Energy efficient equipment upgrades include commercial-grade dishwasher that utilizes exhaust heat to heat incoming cold water.

Area 6: Green Space

Goal: Continue the development and implementation of sustainable design and maintenance of all campus grounds

Additional locations were incorporated into the smart irrigation system and the possibility to retrofit existing stormwater detention tanks for possible irrigation use was investigated.

Area 7: Water Conservation

Goal: Reduce the consumption of potable water

A University water use profile was established for the first time. Since the water use on the Hyde Park campus for the buildings within the greenhouse gas emissions inventory has been quantified by fiscal year, it is now possible to identify areas of opportunity for potable water use reduction. A plan for this is under development.

Area 8: Environmentally Preferable Procurement

Goal: When feasible, reduce the environmental impact of products and services throughout the University supply chain

Facilities Services developed proposed contract language for construction projects less than \$5 million, and provided sustainability language for contracts and requests for proposals to be included when applicable.

Area 9: Building Awareness and Partnerships

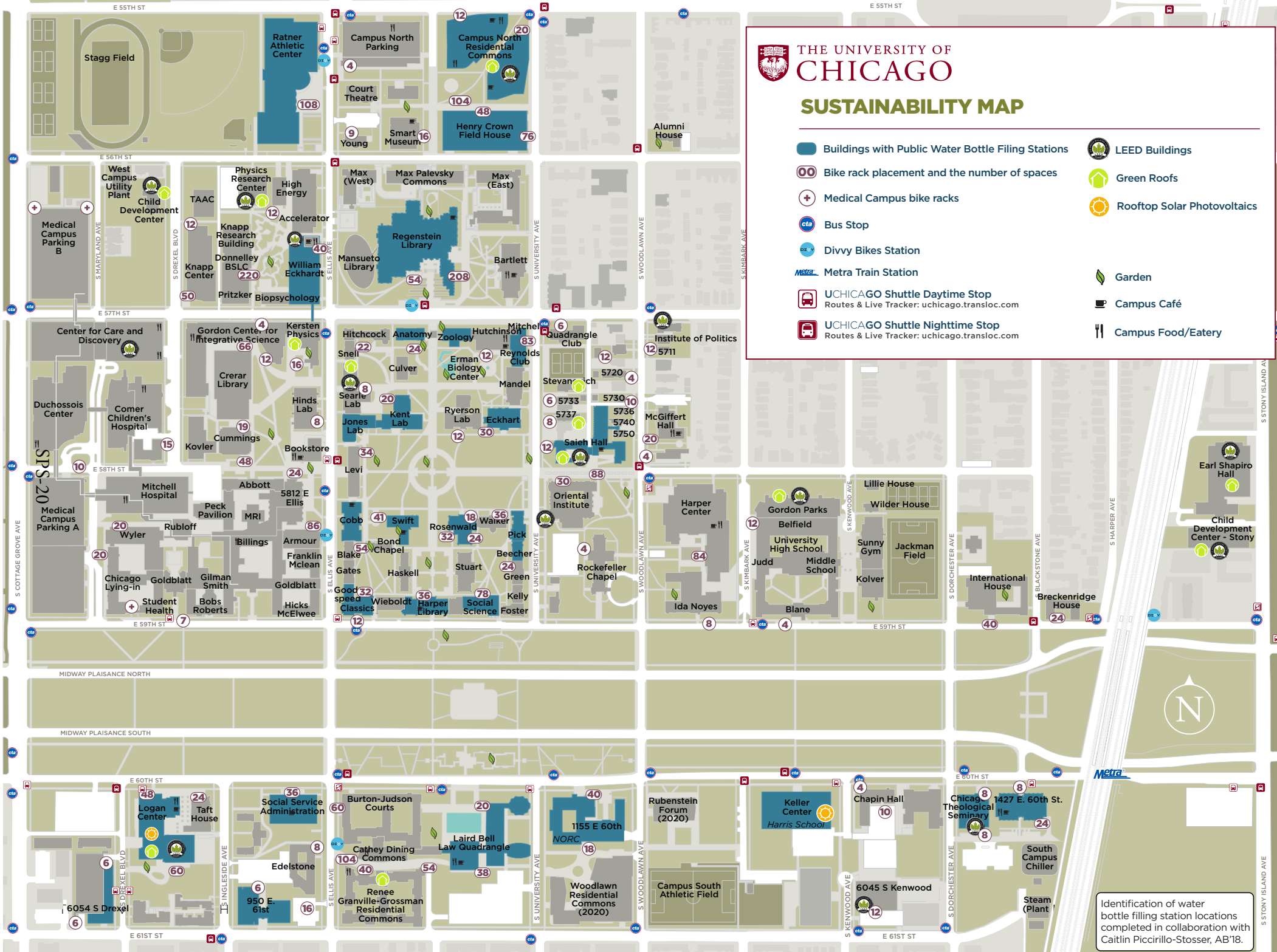
Goal: Involve the entire University community in creating a more sustainable campus

Collaborate with Student Government Committee on Campus Sustainability, Office of the Provost, Mansueto Institute for Urban Innovation, Physical Sciences Division, and Program on the Global Environment on Environmental Frontiers to engage students on projects related to natural resource management. Completed and posted on the website a [campus sustainability map](#). Evaluated Association for the Advancement of Sustainability in Higher Education Sustainability Tracking, Assessment & Rating System™ AASHE STARS and selected relevant projects to engage Campus and Student Life and other campus partners to improve campus sustainability.

 THE UNIVERSITY OF CHICAGO

SUSTAINABILITY MAP

-  Buildings with Public Water Bottle Filing Stations
-  LEED Buildings
-  Bike rack placement and the number of spaces
-  Green Roofs
-  Medical Campus bike racks
-  Rooftop Solar Photovoltaics
-  Bus Stop
-  Divy Bikes Station
-  Metra Train Station
-  Garden
-  UCHICAGO Shuttle Daytime Stop
Routes & Live Tracker: uchicago.transloc.com
-  Campus Café
-  UCHICAGO Shuttle Nighttime Stop
Routes & Live Tracker: uchicago.transloc.com
-  Campus Food/Eatery



Identification of water bottle filling station locations completed in collaboration with Caitlin Piccirillo-Stosser, AB'18.

STUDENT PERSPECTIVES: CAMPUS SUSTAINABILITY

Issues

Proposed Solutions

Peer Institutions

Student Research & Projects

- Absence of a central institution and **physical space for collaboration** between students and University partners around environmental research and issues
- **Lack of administrative support** for actualizing environmentally-focused student research and projects

- **Establishment of a center for collaboration**, such as the Environmental Frontiers Initiative already proposed to the University administration
- **Designated fund to support student research and projects** around the University's resource consumption and environmental impact, broadly defined

- **Stanford** Woods Institute for the Environment is Stanford's hub for interdisciplinary environmental studies
- **Harvard** Green Revolving Fund is a \$12 million revolving loan fund that provides up-front capital for projects that reduce Harvard's environmental impact
- **Princeton** High Meadows Foundation Sustainability Fund awards up to \$10,000 to students and faculty

Transparency & Communication

- Need for **more ambitious long-term sustainability goals**
- **Understaffed** Office of Sustainability and Facilities & Services management
- **Poor quality data** on resource consumption & waste management
- **Unwillingness by University administration to release data** to students, faculty, or the public

- **Public commitment** to sustainability goals that rival peer institutions
- **More personnel** to expand the work of the Office of Sustainability and to identify the University's areas of opportunity, implement solutions, and communicate its progress
- Data sharing tools and **ability to access information about energy, water, and waste management** for student research

- **Stanford** publishes an annual sustainability report and real-time utility consumption data for 135+ campus buildings
- **Harvard** cut emissions by 30% from 2008 to 2016 and committed to be fossil-free by 2050
- **Yale** publishes an annual sustainability report and plans to achieve carbon neutrality by 2050

Sustainable Infrastructure

- **High energy inefficiency and poor systems management**, especially in campus labs and aging buildings
- **Lack of infrastructure to collect precise data** to diagnose problems, let alone implement solutions

- **Administration-supported task force** to investigate utility consumption, then set and realize goals for improvement
- Investment in **modernization of infrastructure**, including systems management and data collection tools

- **Harvard** built 100+ LEED buildings and implemented 1,600 energy initiatives after auditing 80% of its campus buildings
- **MIT** implemented DataHub and DataPool with Amazon Web Services to store and analyze environmental impact data--accessible to the entire MIT community